



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,196	01/23/2007	Yoshiyuki Kono	Q95815	8443
23373 7590 04/14/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
FACTEAU, LINDSAY				
ART UNIT		PAPER NUMBER		
4151				
MAIL DATE		DELIVERY MODE		
04/14/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/587,196

Applicant(s)

KONO, YOSHIYUKI

Examiner

LINDSAY FACTEAU

Art Unit

4151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2007.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 23 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-850)
Paper No(s)/Mail Date 10/20/2006 and 07/25/2006
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: the word "proceeds" should be singular --proceed--(pg. 10, line 11), the word "γ-methacryloxypropylpolyalkoxysilanens" seems to be the misspelling of the word -- γ-methacryloxypropylpolyalkoxysilanes--(pg. 19, line 25), the word "be" seems to be missing from the sentence --...mechanical physical properties balance can be favorably attained while...-- (pg. 26, line 31), and the word "suitable" seems to be the misspelling of the word --suitably-- (pg. 31, line 18).

Appropriate correction is required.

2. The use of the trademarks ARONIX M-210, ARONIX M-215, ARONIX M-220, ARONIX M-233, ARONIX M-240, ARONIX M-245, ARONIX M-305, ARONIX M-309, ARONIX M-310, ARONIX M-315, ARONIX M-320, ARONIX M-325, and ARONIX M-400 (PG. 42, LINES 16 - 20) have been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5-10, 13, 14, 16-17, 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Yukimoto, US Patent number 4,983,700 (hereinafter '700).

5. In regards to claims 1, 2, 3, 5, 6, 8, 9, 13, 14, 16, 17 and 19, '700 discloses an oxyalkylene base polymer with a backbone of -R1-O- wherein R1 is a substituted or unsubstituted divalent hydrocarbon group having 1 to 12 carbon atoms (column 2, lines 50 - 64) with at least one silicon-containing reactive group (abstract) bonded to the backbone of the formula



wherein R2 is a substituted or unsubstituted C1-C40 organic group, X is a hydroxyl group or a hydrolysable group, a is 0 – 2, b is 0 – 3 (reads on the claimed a value), and m is an integer of 0 - 19, and when two or more R2 groups are present they may be the same or different, and when two or more X's are present they may also be the same or different (column 3, lines 6 – 26) and has 1.1 - 4 silicon-containing reactive groups on

the average per molecule (column 4, lines 14 – 15) which reads on the claimed (A) polymer. Also, '700 discloses that the oxyalkylene base polymers may be used independently or in a mixture of two or more of them (column 4, lines 20 – 22), which reads on the claimed (B) organic polymer.

6. In regards to claims 7 and 20, '700 further discloses that the oxyalkylene polymer should have a molecular weight of 3,000-30,000 (column 4, lines 18 – 22). The specification does not give reason for a molecular weight to go below 3,000, thus the range is deemed anticipatory over the claimed range.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 4, 10-12, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over '700.

10. In regards to claims 4, 11, 12, 15 and 18, '700 further discloses that the oxyalkylene base polymer may be prepared by various methods, including reacting the oxyalkylene base polymer having a first functional group Y with a compound having the silicon-containing reactive group and a second functional group Y' which reacts with the first functional group Y, whereby the silicon-containing reactive group is introduced in the oxyalkylene base polymer (column 4, lines 23 – 30). '700 fails to teach the specifically claimed compound-to-polymer mole ratio, but because the range of '700 falls within the claimed range and would not result in a lower adhesive property, it is deemed obvious over the claimed range.

In regards to claim 10, '700 further discloses that a mixture of two of the oxyalkylene base polymers can be used in the compound wherein the bond strength is increased when used as an adhesive (column 10, lines 63 – 68), but fails to teach that the weight of second polymer should be less than the first by at least 1,000. However, because the higher the molecular weight the higher the viscosity as is known, it would be obvious to one skilled in the art at the time of the invention to use lower molecular weight polymers to keep the viscosity of the adhesive lower to improve the adhesive properties.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINDSAY FACTEAU whose telephone number is

(571)270-7735. The examiner can normally be reached on Monday - Thursday, 8 am - 5 pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Ortiz can be reached on (571) 272-1206. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Katarzyna Wyrozebski/
Primary Examiner, Art Unit 1796

LF